IN THE SPECIFICATION:

Page 4, please amend the paragraph beginning at line 6 as follows:

In an apparatus for plasma processing which has a vacuum vessel forming a plasma producing part, a gas supplying means for supplying a gas to the vacuum vessel, an antenna generating an electric field in the plasma producing part, a Faraday shield provided at outer periphery of the vacuum vessel, a high-frequency electric source supplying a high-frequency electric power to the antenna and the Faraday shield, and an end point determination and detection means, the end point determination and detection means detects the end point of cleaning of the inner wall of the vacuum vessel by detecting emission wavelength of reaction products or ~~a material of~~ products formed from the vacuum vessel.

Page 5, please amend the paragraph beginning at line 24 as follows:

The present invention will be explained below, referring to the drawings. FIG. 1 is a sectional view of a plasma processing apparatus of the present invention. Vacuum vessel 2 has therein a discharge part 2a which comprises an insulation material (e.g., non-conductive materials such as quartz, ceramics, etc.) and which forms a plasma producing part and a processing part 2b in which a sample 12 to be processed and an electrode 5 for placing the sample 12 thereon are disposed. The processing part 2b is grounded to an earth and the electrode 5 is set at the processing part 2b with interposing an insulation material between them. A coil-shaped inductively coupled antenna 1 having antenna parts 1a and 1b is disposed at outer periphery of the discharge part 2a. Furthermore, a disc-like Faraday shield 8 which capacitively couples with plasma 6 is provided outside the discharge part 2a. The inductively coupled antenna 1 and the Faraday shield 8 are connected in series to a first high-frequency electric source 10 through a matching device (matching box) 3. Furthermore, a circuit whose impedance can be varied is grounded to earth in

parallel with the Faraday shield 8. A processing gas is supplied into the vacuum vessel 2 from a gas supplying device 4 and simultaneously the pressure is reduced to a given pressure to perform exhaustion by an exhaust device 7. The processing gas is supplied into the vacuum vessel 2 from the gas supplying device 4, and this processing gas is converted to plasma by the action of an electric field generated by the inductively coupled antenna 1 and the Faraday shield 8. A second high-frequency electric source 11 is connected to the electrode 5. Moreover, an electric field for production of plasma is obtained by supplying to the inductively coupled antenna 1 and the Faraday shield 8 a high-frequency electric power generated by the first high-frequency electric source 10, e.g., an HF band such as 13.56 MHz, 27.12 MHz, or 40.68 MHz, or a VHF band further higher in frequency, but in order to inhibit reflection of the electric power, impedance of the inductively coupled antenna 1 is matched with output impedance of the first high-frequency electric source 10 using the matching device (matching box) 3. The matching device (matching box) 3 used generally includes two variable condensers ~~9~~ 9a and 9b capable of varying electrostatic capacity which are called inverted L type. Furthermore, in order to lead ions present in the plasma 6 to the sample 12, a bias voltage is applied to the electrode 5 by the second high-frequency electric source 11.